



CITY OF ATLANTA

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Kasim Reed
Mayor

DEPARTMENT OF PROCUREMENT
Adam L. Smith, Esq., CPPO, CPPB, CPPM, CPP
Chief Procurement Officer
asmith@atlantaga.gov

November 5, 2014

Dear Potential Proponents:

**Re: FC-7704; Lot Boundary Conversion and Street Centerline
Enhancement**

Attached is one (1) copy of **Addendum No. 2**, which is hereby made a part of the above-referenced project.

For additional information, please contact Lloyd A. Richardson, Contracting Officer, at (404) 864-8504, or by email at larichardson@atlantaga.gov.

Sincerely,

Adam L. Smith

ALS/lar

Attachment

cc: Mr. Paul Thomas
Mr. Greg Kiah

ADDENDUM NO. 2

This Addendum No. 2 forms a part of the Request for Proposals and modifies the original solicitation package as noted below and is issued to incorporate the following:

- The Proposal Due date is extended to **Wednesday, November 12, 2014**
- **Replacement of Exhibit B; Scope of Services**
Exhibit B; Scope of Services is hereby removed and replaced with a revised Scope of Services (dated 11/5/14) attached hereto as Attachment No. 1.
- **Questions and Answers**
Total of three (3) questions attached hereto as Attachment No. 2.

Addendum No. 2 for FC-7704; Lot Boundary Conversion and Street Centerline Enhancement is available for pick-up in the Plan Room: City Hall, 55 Trinity Avenue, Suite 1900.

The Proposal due date has been modified and Proposals are due on Wednesday, November 12, 2014 and should be time stamped in no later than 2:00 P.M. EDT and delivered to the address listed below:

Adam L. Smith, Esq., CPPO, CPPB, CPPM, CPP
Chief Procurement Officer
Department of Procurement
55 Trinity Avenue, S. W.
City Hall South, Suite 1900
Atlanta, Georgia 30303

**** All other pertinent information is to remain unchanged****

Acknowledgment of Addendum No. 2

Proponents must sign below and return this form with your proposal to the Department of Procurement, 55 Trinity Avenue, City Hall South, Suite 1900, Atlanta, Georgia 30303, as acknowledgment of receipt of this Addendum.

This is to acknowledge receipt of **Addendum No. 2, FC-7704; Lot Boundary Conversion and Street Centerline Enhancement** on this the _____ day of _____, 201__.

Legal Company Name of Proponent

Signature of Authorized Representative

Printed Name

Title

Date

Attachment No. 1



CITY OF ATLANTA
Department of Planning & Community Development
The Office of Buildings & Office of Planning

Lot Boundary Conversion RFP
REVISED 11/5/14

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Introduction and Background

The City of Atlanta Department of Planning and Community Development – Office of Buildings and Office of Planning (City) are soliciting proposals for Cadastral (Lot Boundary) Conversion services. The project area concerns all land included within the corporate city limits which falls within both Fulton and DeKalb County. These specifications set forth the requirements for a seamless, Geodatabase using ESRI's suite of GIS software. The Consultant will furnish all labor, material, and equipment necessary to properly complete the work specified herein.

1.1 General Information

The City of Atlanta is approximately 132 square miles. It lies within two counties (Fulton & DeKalb) and contains approximately 160,000 lots. This creates a unique situation which makes timely and accurate land management updates somewhat cumbersome. Current business drivers make it necessary to maintain three parcel/lot boundary datasets to get an accurate view of property geometry. Both Fulton and DeKalb County provide an annual tax parcel¹ digest which identify ownership for taxation. However, the City maintains an independent cadastral (lot boundary) map² layer which identifies officially recognized lots that meet the cities pre-requisite for development. The ability to maintain accurate and up to-date boundary changes is a critical path for all business operations within the Office of Buildings. The lot boundary layer is the foundation for all permitting, inspection, and zoning activities.

1.2 Existing Mapping Summary

For several years the City has created tools and procedures to accommodate the growing needs of the departments it support. The ability to update our lot boundary map is a vital foundational task. Atlanta, like many cities maintained its official property boundaries by updating mylar map sheets. This soon became a timely and laborious task. The City needed a digital representation of its approved lot boundaries to simplify updates. However, due to limited resources the City decided on a consolidation method rather than a full heads-up digitization. Meaning, we did not create digital lot boundary maps from scratch. Instead, we started by digitally stitching together portions of Fulton and DeKalb county tax parcel maps. This became the first stage of our working GIS layer for updating approved lots³ from new plats and replats. However, by using the county tax parcel digest as our base; we inherited spatially inaccurate data and unapproved lot configurations. Since our need was a layer with only City approved lots we would overlay the corresponding scanned, geo-referenced mylar map sheet, and compare lots one-by-one to validated correctness.

¹**Tax Parcel** A tract of land recognized by the county for the purpose of assessing property value and collecting real estate (property) tax.

²**Lot Boundary Map (Cadastral Map)** the working map representing a compilation of all approved lots in the City of Atlanta.

³**Approved Lot (or simply "Lot")** A tract of land recognized by the City of Atlanta through a formal subdivision approval process according to land regulations defined in the City's Code of Ordinances.

Scope of Services

The City of Atlanta Department of Planning and Community Development – Office of Buildings and Office of Planning is seeking a qualified GIS consultant to provide professional services to create a digital property boundary base to facilitate GIS functions. The City desires a state of the art technological land management solution capable of supporting its current and future enterprise business application needs. The City prefers not to have a custom developed solution. Rather to take advantage of existing land parcel data models and commercial-off-the-shelf (COTS) land parcel maintenance application to the fullest extent possible.

2.1 General Information

The City started its in-house conversion process as outlined in section *1.2 Existing Mapping Summary*. It was determined that utilizing existing county parcel data as the base was the best approach rather than heads-up digitizing. However, our current process falls short in supporting our long-term needs. The City has the need for a more accurate and scalable solution. The consultant is required to provide a detailed methodology that meets specifically these key areas of improvement.

1. Develop a new digital lot boundary base layer from existing hand-drawn mylar cadastral (lot boundary) maps and approved submitted plat improvements.
2. Development of a lot boundary maintenance application using the most current software and technology.

The primary source documents for reconstruction of the city lot boundary base should be the original cadastral lot boundary maps to the extent that it is feasible to do so. Where primary source material is missing, incomplete or requires inordinate effort to research then secondary sources such as existing plat maps, aerial photos, or other sources may be used. The geodatabase will store points, lines, and areas using the Geographic Coordinate NAD 1983 State Plane Georgia West FIPS 1002 Feet. Also, attribute data and/or annotation associated with each graphic feature. In addition to these items, all attributes associated with the current lot feature should be included. The minimum existing attributes to be captured include:

- Parcel ID
- Lot Dimension
- Lot ID
- Landlot/District
- Address

These feature classes should be fully populated prior to delivery, and will contain the same tabular attributes as the source data files.

2.2 General Requirements

The following information indicates the general requirements, guidelines, and expectations. It constitutes a base standard of expectations accuracy, content, etc. This RFP offers the respondents the opportunity to offer alternatives with an explanation of their advantages and detriments with respect to the task itself as well as the overall scope of the project.

The project will consist of the following tasks to be provided by the Consultant:

- Meet with City of Atlanta Office of Planning GIS Department and review existing workflows to ensure that the new technology will cause minimal disruptions while providing maximum benefits.
- Participation with the City in review, validation, and modification of the current lot boundary geodatabase design(s) as provided by the City.
- The proposed geodatabase schema must not include any proprietary components. All components of the proposed geodatabase model must be functional within the Standard (ArcEditor) licensing level of ArcGIS. Vendor respondents are encouraged to propose data models that take full advantage of, and which expand upon, the ESRI Geodatabase, as long as the resulting data model can be opened for editing by ArcGIS Standard (ArcEditor) without any third-party licensing.
- The proposed data model should be supported by a set of off-the-shelf productivity map editing tools that load as an extension to ArcMap. The expectation is that existing off-the-shelf software will be used to enhance the lot boundary map editing capabilities.
- Assist the City in the acquisition and preparation of source documents and materials necessary to successfully complete the project.
- Assist the City in identifying a 10% system pilot project to verify the geodatabase design and production methodologies. The pilot project will include all aspects and data types of the geodatabase model and consist of eight agreed upon areas measuring approximately 6000' X 6000' each containing no more than 2000 parcels.
- Development of a citywide seamless lot boundary geodatabase using the existing or approved modified data model, including appropriate topology rules, domains, and feature classes using the approved construction methodologies.
- Develop and implement any automated tools that will allow the City to better maintain the database.
- Provide on-site technical support and maintenance services for a period of time after acceptance of the project by the City.
- Include a detailed description of all quality control and assurance methods for all components of this project.

- Development and maintenance of an online tracking website for the duration of the project.

2.3 Data Acquisition and Source Documents

2.3.1 Initial Data Acquisition

City of Atlanta will provide the Consultant with access to all source data required to begin the lot boundary conversion project. We will provide copies and/or remote access to all digital property records. Paper maps and documents will need to be scanned and indexed by the Consultant. Scans will be captured and indexed in such a way as to allow subsequent reference or links to features in the GIS database, stored as standard image files (e.g. PDF, TIFF) or in a raster geodatabase.

2.3.2 Source Documentation

The City shall be responsible for providing the Consultant with the following:

- Shapefiles of current county tax parcel data, planimetrics, impervious surface layers, street centerline, county and city boundary, and lot boundary index.
- Digitally scanned and Geo-rectified copy of improvement plats in TIFF format. Consisting of approximately 2000 files. Plat maps are drawn at varying scales of either 1"=20 ft, 1"=30 ft, 1"=40 ft or 1"=60 ft. This data is also available in the original hardcopy format.
- Digitally scanned and Geo-rectified copy of City approved Lot Boundary Mylars in TIFF format consisting of approximately 445 files. Lot Boundary maps are drawn at 1"=200 ft. This data is also available in the original hardcopy format.
- Assistance in gaining access to all available information within our land management software Accela Automation.

2.4 Term of Project

The services to be performed, excluding support and maintenance, shall commence within ten (10) days from the date of receipt of the written notice to proceed and shall be completed in accordance with the terms of the contract. Responders shall provide the number of calendar days (including weekends and holidays) needed to complete the entire project (excluding support and maintenance) in the Technical Proposal.

2.5 Data Ownership

City of Atlanta will have exclusive ownership of all data and products created as a result of this project and will retain exclusive rights to such. All software (except that identified as existing and owned by the successful Consultant prior to contract award), maps, drawings, digital data, specifications, plots, reports, geodatabase schema, geodatabase dictionary, and other products and material (including copies thereof) relating to this project, developed for this project, or prepared in connection therewith, are the exclusive property of the City and will be delivered to the City in accordance with the project schedule or upon termination of the project. The successful Consultant shall not assert or establish any right or claim under design patent or copyright laws to any of the materials created or produced specifically for, and in conjunction with, this GIS project.

All data and other records supplied to the Consultant for this project will remain the sole property of the City. The Consultant will not, without written consent, copy or use such records, except to carry out contracted work, and will not transfer such records to any other party not involved in the performance of the Contract pursuant to this RFP, the Consultant will return all submitted records to the City upon completion of the work. The City will have the right, without the consent of the Consultant, to extract such data in industry standard formats, using standard utilities and at no cost to the City.

All intermediate products generated and used by the Consultant will become the property of the City. The City will take delivery of scanned images of plats, surveys, etc. that may be produced during the project.

Project Management

3.1 Project Production Location(s)

City of Atlanta encourages the establishment of a project office in the Atlanta region. The City will also consider making office space available to the project and/or the quality control team personnel.

3.2 Project Management Requirements

The Consultant will provide the following project management services in conjunction with the project:

1. Project Plan and Schedule
2. Project Status Web Page
3. Project Status Reports
4. Project Meetings
5. Procedures Manual

3.2.1 Project Plan and Schedule

The Consultant will provide a detailed Project Plan showing all milestones and tasks that will be needed to complete the project, in accordance with the Scope of Services in this RFP. The Project Plan will identify all resources necessary and actions required by both the successful Consultant and the City. The Project Plan will specify the Consultant and/or subcontractor's company name next to each task for which they are responsible. The City requires that the Consultant identify the name of the firm's resource(s) that they intend to allocate to the project and specify that resource's name. Each task that the City is to be responsible for should reflect "City" next to that particular task.

The Project Plan does not need to reflect specific dates at this time for each task, but will reflect the amount of time being allocated for each task. These times will be stated in calendar days (including weekends and holidays). The successful Consultant will be required to prepare finalized Project Schedule using Microsoft Project software or equivalent within sixty (60) days of the Project Start Date. The Plan will reflect all milestones and tasks to be completed for the entire Project and shall depict resources assigned to each task by

name in the Project Plan. The Project Plan will reflect the Project Completion date to be on or before the number of calendar days stated in the Technical Proposal for completion of the entire project. The Consultant will be required to update it on a periodic basis to be determined by the City. During the course of the project, regularly scheduled progress reports and meetings will be required. See Section 3.2.3: Project Status Reports and Section 3.2.4: Project Meetings for details.

3.2.2 Project Status Web Page

The selected Consultant will be required to host a secure web page to report ongoing project progress for the duration of the project. An ESRI ArcServer or ArcGIS online website should be created and customized to host the data for project progress.

3.2.3 Project Status Reports

Throughout the project, the Consultant must establish and maintain procedures for tracking and reporting project progress. The Consultant will be required to submit to the City written project status reports on a monthly basis. Telephone project status reports will also be provided every two weeks throughout the project. The reports will include a brief written summary of progress and other pertinent information. Written project status reports will, as a minimum, contain the following:

1. Delivery status
2. Deliveries submitted
3. Meetings held, planned or required
4. Issues / problems encountered (mapping, management, etc)
5. Issues / problems resolved
6. Potential problems
7. Production goals

3.2.4 Project Meetings

The City will require that the selected Consultant meet in person with City of Atlanta representatives on a monthly basis and at several key steps in the project, as listed below:

1. Project Initiation Meeting
2. Delivery of Pilot Area
3. Pilot Project Review
4. Pilot Project Acceptance Meeting with Users
5. Monthly meetings with the full Project Team
6. Beginning of Production Phase
7. Periodically Until Completion and Acceptance (TBD)

3.2.5 Disclosure of Sources

The Consultant, and/or its subcontractor(s), will establish and maintain procedures and controls for the purpose of assuring that no information in its possession obtained from City of Atlanta for the sole use of carrying out functions under this project, will be used for any other purpose or disclosed to any outside parties. City of Atlanta reserves the right to review such procedures to ensure acceptability to the City. If information and/or records are requested of the Consultant, and/or its subcontractor(s), from any entity, City of Atlanta will be notified immediately. City of Atlanta will directly address and respond to any and all requests. Failure by the Consultant and/or its subcontractors to adhere to this requirement may result in termination of the contract.

3.2.6 Return of Source Materials

All source materials provided to the Consultant by the City will be returned. All such material will be organized according to their respective tasks and returned in the condition in which they were provided.

Pilot Project & Conversion Specifications

4.1 Pilot Project

A pilot project consisting of approximately 10% of the city system will be conducted and completed by the selected Consultant before entering into full production. The Consultant will conduct an on-site demonstration of the pilot project to City staff for review and approval. The City and the Consultant will mutually determine the pilot project area. The objective of the pilot shall be:

- Execute and validate all procedures
- Identify risk and process improvements
- Produce a model geodatabase covering the pilot area
- Finalize quality control procedure
- Validate geodatabase integration
- Evaluate and approve all specified products
- Finalize project schedule

The pilot project will also be completed to assure the City that the Consultant is capable of performing the work in a timely manner according to the requirements specified. The City will provide the Consultant access to the necessary source materials covering each increment of work. The Consultant will recommend methods to the City to collect, reproduce, and catalog the source materials based upon the procedures developed during the pilot project.

Source documents will be collected for the pilot area. The Consultant will compile property map files for the designated pilot area. During construction of the data, the Consultant will identify exceptions. When the Consultant is unable to resolve the problem according to the agreed upon procedures, the Consultant will notify the City and suggest possible modifications to the resolution process.

The Consultant will also provide the appropriate source materials for quality control checking with each deliverable. Acceptance and quality control checks will be performed. Upon acceptance of the products, the Consultant will be required to return all source documents.

The pilot phase will be completed when the specifications and procedures have been validated and revised to reflect the results of the pilot project. It is only after acceptance of the pilot project that authorization to proceed into the production phase will be approved.

4.2 Lot Boundary Conversion Specifications

The delivered geodatabase should be a representation of approved city lots. The geodatabase will include features and attributes that comply with established topology validation rules. For example, boundary polygons will not have gaps or overlaps unless indicated so by the original source documents. Lot boundary lines will not have dangles or overlap other boundary lines.

4.2.1 Spatial Continuity

The structure of the map data will not inhibit the execution of GIS functions across boundaries or artificial discontinuities (sheet edges, model edges, or other demarcations). The Consultant will verify that features have not been omitted, "snapped" out of place, or trimmed as dangles. All polygons and lines will be verified by the Consultant prior to delivery for proper closure and connectivity as appropriate.

4.2.2 Data Integrity

Edge matching: All Manuscript maps and digital data must match at the edges both visually and in terms of coordinate location. No edge match tolerance will be allowed. Attributes for adjoining features must also be identical. The City will work with the Consultant to assist in resolving current edge match issues in source materials. Incremental delivery units must edge match with previously delivered geographic areas.

1. Each digital file and/or hardcopy plat or map must be converted as a complete unit within the geodatabase structure. Adjacent or adjoining source data must register to each other.
2. All graphic features that share a common boundary, regardless of the digital map coverage, must have the exact same digital representation of that feature in all common digital files.
3. Connectivity: Where graphic elements visually meet, they must also digitally meet. Lines that connect polygons must intersect those polygons precisely, that is, every end point must be an intersection point of the respective polygon.
4. Line Quality: Transitions from straight line to curvilinear line segments shall be smooth, and without angular inflections at the point of intersection. There should be no jags or hoods or zero length segments. Curvilinear graphic features should be smooth with a minimum number of points. When appropriate, line smoothing programs should be used to minimize the angular inflection in curvilinear lines. Any lines that are straight, or should be straight, should be digitized using only two points that represent the beginning and ending points of the line.
5. Segmentation: The digital representation of linear elements must reflect the visual network structure of the data type.
6. Point Criteria: All point features shall be digitized as a single X, Y coordinate pair at the visual center of that graphic feature.
7. Labels and Annotation: All labels and annotations shall be consistent in defined sizes, fonts, levels, angles and offsets as identified in the pilot project.

4.2.3 Compilation Methodology

The Consultant's proposal will provide a generalized description of the major steps in the conversion effort. The proposed method for compiling a new property geodatabase will be described. Specifically, the use of the existing source documents in the hierarchical order should be discussed. The generalized plan will also describe the various steps involved in the data conversion process from initial set-up through final processing, including the methodology for the addition of attribute data to the geodatabase.

4.2.4 Precision and Accuracy Standards

The accuracy of the lot boundary lines will be defined relative to visibility on the orthophotos. For purposes of this conversion, well-defined indicators shall include any feature indicative of evidence of property that can be sharply defined as discrete lines. Examples may include, but not be limited to, pavement edges, fence lines, buildings, or hedges and hydrographic features. Road Centerlines shall nominally lie completely within the rights of way shown on the lot boundary data. An exception to this requirement would be if in the judgment of the map compiler the street was not in fact built within the right of way or there are undeveloped rights of way or newly constructed roads for which no representation exists on the orthophoto or in the existing centerline file. The City will select well-defined indicators in consultation with the Consultant during the pilot phase. The data converted from the lot boundary maps shall not deviate from well-defined indicators by more than agreed-upon tolerances.

It is recognized that the recorded dimensions and orientation of real property boundaries to be shown in the digital cadastral map files and finished cadastral maps may not always agree with apparent physical locations derived from the orthophotos and/or planimetric and topographic data. As a result, overlapping or separated property boundary descriptions may be expected to exist.

4.2.5 Graphic Element Placement and Adjustment Guidelines

Adjustment of graphic boundaries as currently shown on the existing source maps may need to be made when the following situations occur:

- Lot lines cross, lie within, or are not consistent with orthophotos.
- Lot lines cross building outlines or road pavement edges. May require additional research.
- Rights-of-way for roadways are not consistent with orthophotos
- Edges of source documents do not match
- Gaps and/or overlaps between adjoining lots
- Other adjustments determined to be necessary during the pilot project

The following techniques and guidelines may be used when making adjustments:

- Rotation of a block or a small group of lots
- Rotation of a subdivision
- Rotation of an entire source document

The consultant should attempt to make adjustments to an entire block of lots first, particularly for those lots included in a subdivision in order to maximize the “best-fit”. Individual lots should not be adjusted to enlarge or reduce their sized unless there are obvious errors in source materials. Lot line segments should also retain their “correct” shape and dimensions after adjustment (a straight line shall continue to be represented as a straight line).

4.3 Lot Boundary Metadata Records

The Consultant will prepare metadata records containing lot-level information about the materials and decisions utilized in the preparation of the digital lot boundary map files. The metadata records shall be prepared in a digital geodatabase format, and will consist of the following fields:

1. Parcel Number
2. Lot ID
3. Agency/Technician Name or Initials
4. Date of Conversion or Mapping
5. Source Document(s)
6. Volume-Page of Source Document(s)
7. Date of Source Document(s)
8. Comments/Problems

The Consultant will collaborate with the City to determine final format and content of the metadata records.

Quality Control and Acceptance Procedure

Ultimately, the City wishes to obtain an accurate and comprehensive set of deliverable products associated with this project as described herein. Proposals must include a comprehensive quality assurance/quality control (QA/QC) plan detailing the equipment, methods, techniques and procedures to be used to address all aspects of the conversion project. The deliverable products must provide a high level of confidence regarding their completeness and their usefulness.

5.1 Resolution of Source Anomalies and/or Discrepancies

Because of the complexity of the project, and the condition of the existing source materials, it is anticipated that inconsistencies and anomalies between source materials and specifications will be encountered. It shall be the responsibility of the Consultant to bring such issues to the attention of the City. The Consultant and the City shall both work together to resolve issues and problems that arise. Reasonable efforts will be agreed upon. The Consultant will be given access to the City's on-line Accela Automation land management application.

5.2 Conversion Priorities

The City has established conversion priorities for this project. As a general rule, conversion of property data will be divided by Land Lot District (i.e., an entire Land Lot District will be converted prior to work beginning in another District). The City has divided the project into three (3) geographic work areas consisting of Land Districts (14F, 18, 15), 17, and 18.

5.3 Quality Control

The Consultant shall achieve a standard of product quality demonstrated in the pilot project, such that all incremental deliveries meet the same specifications regarding the structure and specifications. City of Atlanta retains the sole right to determine adherence to the contract specifications and quality requirements. Judgment by City that the Consultant is in breach of the quality control requirement may require suspension of map compilation and file production until such time as the Consultant can determine that such problem(s) have been remedied.

The Consultant shall include in the proposal a description of the quality control process that will be used to verify the accuracy, completeness, consistency in symbology and annotation, graphic quality, and overall integrity of the final products. The quality control process shall include internal checks during all phases of geodatabase construction. The Consultant shall demonstrate that the quality control procedures that will be used will ensure adequate checks and appropriate editing during all phases of geodatabase development. The Consultant shall provide forms, flow charts, or other materials to document the quality control process at the City's request.

5.4 Acceptance Procedures

The following procedures will be employed during the City's quality control and acceptance procedures for all products submitted by the Consultant:

The City will conduct office editing and review digital data utilizing the source data returned by the Consultant. This will ensure that the City is using the exact same documents for the review process as were used by the Consultant to prepare the data and should eliminate potential issues caused by out-of -sequence source material.

- The Consultant will provide the corrected lot boundary data and all attendant source documents to the City.
- The City will inspect the deliverable to determine compliance.
- Should the deliverable be found by the City to meet the specifications, the City will notify the Consultant that said materials are accepted in full by the City. The Consultant will return all attendant source documents utilized in the preparation to the City. See Section 5.4.3: Acceptance Categories "Accepted".
- Should the deliverable be found by the City to require further revisions to comply with the specifications, the City will so notify the Consultant and return to Consultant for correction. See Section 5.4.3: Acceptance Categories "Received - Edited".
- The Consultant shall then follow the procedures noted in Section 6.0 and subsequent paragraphs to produce and deliver to the City the finished digitally converted lot boundary geodatabase.

5.4.1 Acceptance Checks

City of Atlanta staff will review and accept delivered data by the Consultant for each delivery area.

All deliverable products will be checked within an agreed upon timeframe from their respective delivery to the City. Digital map files will be subjected to a series of inspections that may include the following:

- Downloading, manipulation, and display of digital files on the City's GIS including, but not limited to, automated checks for data completeness, polygon closure, attribute validity, connectivity, and data relationships performed as appropriate to assure the completeness and usability of the data captured.
- Comparison of data and file content with corresponding documents including, but not limited to, visual checks against the primary source(s) for completeness and accuracy of data capture.
- Comparison of data and file content with geodatabase design and symbology specifications.
- Checks of polygon closure.
- Comparison of labeling with sources.
- Other checks against specifications as appropriate.
- Checks of data across delivery areas

5.4.2 Rejection Criteria

The City will consider the following rejection criteria. These are subject to modification in consultation with the successful bidder and consideration of the geodatabase design:

- Labeling errors
- Incorrect tolerances
- Polygon closure
- Missing or incorrect cadastral features which occur at a greater than one percent error rate
- Invalid topology
- Missing or incorrect attribute

Written notification will be made by the City for tentative acceptance of each delivered area within an agreed upon timeframe from the initial delivery.

5.4.3 Acceptance Categories

After initial checking, work increments will be categorized by the City as follows:

- **ACCEPTED:** Products that meet specifications and contain no errors, or so few errors as to be acceptable to the City, will be formally indicated as accepted; the City may resume responsibility for minor corrections, after which the Consultant will be notified, so that problems will not reoccur on subsequent products.
- **RECEIVED-EDITED:** The product has a number of errors that do not permit acceptance. For the product to be accepted, the Consultant must correct all errors noted by the City. The City will verify through a recorded edit that the Consultant has made all corrections called for in the first edit.
- **RECEIVED:** The numbers and character of errors detected by the City are such that the product is returned to the Consultant without a complete edit. The City will formally notify the Consultant of the rejected status of the product. The Consultant must edit and correct the mapping for resubmittal to the City.

If the City determines that there are an excessive number of rejected products, the City may require the Consultant to suspend production until the problem(s) are resolved. Completion of any required corrective actions shall not affect the Consultant's production schedule. The acceptance of each product will be based on quality checks for content and accuracy, digital file format, symbology, and annotation, accuracy of digitizing.

Project Deliverables

6.0 Deliverable Products

Delivery of GIS data will be a personal or file geodatabase that will be integrated with the enterprise geodatabase hosted by Oracle and accessed through ArcSDE. The Consultant and City may create and/or modify properties of the geodatabase as necessary as a result of the pilot project finalization (e.g. field types and widths, domains and/or subclasses, default values assigned, topologies, relationships, views, etc.) and will establish rules to ensure topology is maintained for each feature class.

The Consultant will provide digital data to the City in the geodatabase format provided. The digital files shall be delivered on a media and in a format that shall facilitate the efficient exchange of data. The City's GIS and data processing staff should be consulted in making any decision related to media transfer specifications. The City will work with the Consultant

to define a labeling format for the data provided. Each delivery label shall include at a minimum:

- Delivery Number / Name
- Date created
- Amount of data
- Name of data provider

A printout listing the contents of all deliveries for each transmittal shall also be provided. The Consultant will maintain a separate copy of the geodatabase until the project is satisfactorily completed and the City is properly trained and equipped to maintain the geodatabase.

6.1 Lot Boundary Data Maintenance Model Tool

The Consultant will provide the City with a lot boundary data maintenance model which describes the complete maintenance cycle. It should address such things as how to process new source material, updating GIS features/data, managing versions/history layers, and identify procedures used to synchronize updates in the GIS systems. A goal of the maintenance model is to streamline the map maintenance process so there should be emphasis on both functionality and ease of use. This data model must have the capability of publishing the feature classes on an as-needed basis for distribution. It is preferred that all aspects of the map maintenance workflow take place entirely within the geodatabase.

The Consultant will create a Procedures Manual which should outline conversion procedures, decision rules, quality control/quality assurance methods, the Lot Boundary Maintenance Model and maintenance procedures/programs to be employed.

Attachment No. 2

Questions and Answers

FC-7704; Lot Boundary Conversion and Street Centerline Enhancement

Question 1: How current (up-to-date) are the Mylar maps?

Answer: The Mylar maps were last updated in the early 1990's.

Question 2: How many new lots are approved each month?

Answer: There isn't an accurate method to determine this number. Applications are submitted randomly from walk-in customers. They may range from single consolidations to seventy-five (75) lot subdivisions. Please note that the City and the selected Contractor will determine a cutoff date to establish the final plat improvement to include in the Scope of Service.

Question 3: Can you provide the make and model number of the scanner that the vendor will be using to scan the Mylar maps? Also, will the vendor be able to copy the files to a portable hard drive? Will the scanned files be retained by the City as a backup?

Answer: Scanner Make/Model – HP Designjet T2500ps eMFP. Please note that the City is providing access to its scanner. The successful Contractor is not required to use the City's equipment. Refer to Section 3.2.6 Return of Source Materials to establish check-out procedures. Yes, the successful Contractor will be able to copy files to a portable device. Yes, please reference Section 2.5 Data Ownership.